

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A non-magnetic, ceramic one-component toner, which can be transferred by ~~means of~~ electro-photographic printing to a glass, a glass-ceramic substrate, a ~~a~~ [[or]] ceramic substrate or a similar rigid or flexible substrate and can be fired in a subsequent temperature process and which contains a substantially inorganic proportion of a foreign substance ~~besides other than~~ a plastic matrix, the toner comprising:

~~characterized in that~~

the proportion of ~~the~~ foreign ~~substances~~ substance exclusively containing ~~contains~~ non-magnetic particles and ~~[[is]]~~ being > 30 to 80 weight-%, in particular 50 to 60 weight-%, wherein ~~the~~ a specific charge of ~~the~~ toner particles lies in a range of > 25 $\mu\text{C/g}$.

2. (Currently Amended) The toner in accordance with claim 1, wherein ~~characterized in that~~ the proportion of foreign ~~materials~~ substance comprises at least one of glass flow particles, ~~and/or~~ pigment particles ~~and/or~~ and charge control particles.

Based Upon: PCT/EP2004/013031

3. (Currently Amended) The toner in accordance with claim ~~1 or 2~~, wherein a ~~characterized in that the~~ particle size of the toner particles, in particular at least one of the glass flow particles ~~and/or and the~~ pigment particles ~~used~~, lies in ~~the a~~ range of 1 to 12 μm (D50 vol), in particular ~~in the range of~~ 3 to 8 μm .

4. (Currently Amended) The toner in accordance with ~~one of claims 1 to 3, characterized in that the~~ claim 3, wherein a proportion of wax ~~lies is in the a~~ range of 1 to 10 weight-%, in particular ~~in the range of~~ 3 to 7 weight-%.

5. (Currently Amended) The toner in accordance with ~~one of claims 1 to~~ claim 4, wherein ~~characterized in that the~~ toner contains at least one of glass flow particles from a specific glass frit in ~~the a~~ range of > 30 to 80 weight-%, in particular 45 to 60 weight-%, ~~and/or~~ inorganic pigments in ~~the a~~ range of 0 to < 20 weight-%, in particular 5 to < 20 weight-%, ~~and/or and~~ a plastic matrix in the range of 20 to 60 weight-%, in particular > 30 to 50 weight-%.

6. (Currently Amended) The toner in accordance with ~~one of claims 1 to~~ claim 5, wherein ~~characterized in that the~~ toner contains charge control materials as additives in the plastic matrix, ~~whose~~ having a proportion ~~lies in the a~~ range of 1 to 5 weight-%.

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7. (Currently Amended) The toner in accordance with ~~one of claims 1 to claim 6, wherein characterized in that~~ the toner has a thermoplastic matrix[[,]] which homogeneously melts on ~~the~~ a substrate in ~~the~~ a temperature range of 100°C to 400°C, in particular 110°C to 150°C.

8. (Currently Amended) The toner in accordance with ~~one of claims 1 to claim 7, wherein characterized in that in the~~ a temperature range of 300°C up to 500°C, the plastic matrix at least one of evaporates with almost no residue ~~and/or~~ and burns off.

9. (Currently Amended) The toner in accordance with ~~one of claims 1 to claim 8, wherein characterized in that~~ the plastic matrix contains toner resins on at least one of a polyester basis ~~and/or~~ and an acrylate basis, in particular one of styrene acrylate, ~~polymethylmetacrylate~~ polymethylmethacrylate, ~~or the~~ and a cycloolefin copolymer Topas^(®) ~~of the Tieona company.~~

10. (Currently Amended) The toner in accordance with ~~one of claims 1 to claim 9, wherein characterized in that~~ the plastic matrix contains at least one of polymers, ~~for example including~~ polyvinyl alcohol, polyoxymethylene, styrene copolymers, polyvinylidene fluoride, polyvinyl butyral, polyesters that are at

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least one of ~~[[()]]~~unsaturated ~~and/or~~ and saturated, or mixtures thereof~~[[()]]~~, polycarbonate, polyvinyl pyrrolidone, vinyl imidazole copolymers, ~~and/or~~ and polyether.

11. (Currently Amended) The toner in accordance with ~~one of claims 1 to~~ claim 10, ~~wherein characterized in that it~~ the toner contains an oxidation ~~means~~ as additives.

12. (Currently Amended) The toner in accordance with ~~one of claims 1 to~~ claim 11, ~~wherein characterized in that it~~ the toner is additionally also coated with auxiliary materials to aid flow, ~~such as~~ including aerosils.

13. (Currently Amended) The toner in accordance with ~~claim 10 or 12~~, ~~wherein characterized in that~~ the additives and the auxiliary materials to aid flow are added in amounts of respectively 0 and 1.0 weight-%, in particular 0.2 to 0.5 weight-%.

14. (Currently Amended) The toner in accordance with ~~one of claims 1 to~~ claim 13, ~~wherein characterized in that~~ the toner particles have an irregular shape and are only partially enclosed by the plastic matrix.

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15. (Currently Amended) The toner in accordance with ~~one of claims 1 to claim 14, wherein characterized in that~~ for breaking down the polymers[[,]] the toner has at least one of peroxides and ~~and/or~~ azo compounds with decomposition temperatures of $> 150^{\circ}\text{C}$.

16. (Currently Amended) The toner in accordance with ~~one of claims 1 to claim 15, wherein characterized in that~~ the toner ~~can be~~ is applied to a transfer medium.

17. (Currently Amended) The toner in accordance with claim 16, ~~wherein characterized in that~~ the transfer medium is a support coated with a gum arabic, ~~for example a paper or a foil.~~

18. (Currently Amended) The toner in accordance with ~~one of claims 1 to claim 17, wherein characterized in that~~ the foreign material ~~used~~ substance is a gemstone ~~such as including at least one of~~ Al_2O_3 , [[or]] ZrO_2 ~~or the like,~~ [[or]] gold, silver, copper [[or]] and a similar non-magnetic material.

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19. (New) The toner in accordance with claim 1, wherein a particle size of the toner particles, in particular at least one of glass flow particles and pigment particles, lies in a range of 1 to 12 μm (D50 vol), in particular of 3 to 8 μm .

20. (New) The toner in accordance with claim 1, wherein a proportion of wax is in a range of 1 to 10 weight-%, in particular of 3 to 7 weight-%.

21. (New) The toner in accordance with claim 1, wherein the toner contains at least one of glass flow particles from a specific glass frit in a range of > 30 to 80 weight-%, in particular 45 to 60 weight-%, inorganic pigments in a range of 0 to < 20 weight-%, in particular 5 to < 20 weight-%, and a plastic matrix in the range of 20 to 60 weight-%, in particular > 30 to 50 weight-%.

22. (New) The toner in accordance with claim 1, wherein the toner contains charge control materials as additives in the plastic matrix, having a proportion in a range of 1 to 5 weight-%.

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23. (New) The toner in accordance with claim 1, wherein the toner has a thermoplastic matrix which homogeneously melts on a substrate in a temperature range of 100°C to 400°C, in particular 110°C to 150°C.

24. (New) The toner in accordance with claim 1, wherein in a temperature range of 300°C up to 500°C, the plastic matrix at least one of evaporates with almost no residue and burns off.

25. (New) The toner in accordance with claim 1, wherein the plastic matrix contains toner resins on at least one of a polyester basis and an acrylate basis, in particular one of styrene acrylate, polymethylmethacrylate, and a cycloolefin copolymer.

26. (New) The toner in accordance with claim 1, wherein the plastic matrix contains at least one of polymers, including polyvinyl alcohol, polyoxymethylene, styrene copolymers, polyvinylidene fluoride, polyvinyl butyral, polyesters that are at least one of unsaturated and saturated, or mixtures thereof, polycarbonate, polyvinyl pyrrolidone, vinyl imidazole copolymers, and polyether.

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27. (New) The toner in accordance with claim 1, wherein the toner contains an oxidation as additives.

28. (New) The toner in accordance with claim 1, wherein the toner is also coated with auxiliary materials to aid flow, including aerosils.

29. (New) The toner in accordance with claim 10, wherein the additives and the auxiliary materials to aid flow are added in amounts of respectively 0 and 1.0 weight-%, in particular 0.2 to 0.5 weight-%.

30. (New) The toner in accordance with claim 1, wherein the toner particles have an irregular shape and are only partially enclosed by the plastic matrix.

31. (New) The toner in accordance with claim 1, wherein for breaking down the polymers the toner has at least one of peroxides and azo compounds with decomposition temperatures of $> 150^{\circ}\text{C}$.

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32. (New) The toner in accordance with claim 1, wherein the toner is applied to a transfer medium.

33. (New) The toner in accordance with claim 32, wherein the transfer medium is a support coated with a gum arabic.

34. (New) The toner in accordance with claim 1, wherein the foreign substance is a gemstone including at least one of Al_2O_3 , ZrO_2 , gold, silver, copper and a similar non-magnetic material.